

Abstracts

A43

PCN101
INPATIENT RESOURCE UTILIZATION IN BRONCHIAL AND LUNG CANCER: ANALYSIS OF 2007 HEALTH CARE UTILIZATION AND PROJECT (HCUP) DATAPatel B¹, Kamal KM¹, Atreja N²¹Duquesne University, Pittsburgh, PA, USA, ²Duquesne university, pittsburgh, PA, USA

OBJECTIVES: To assess overall inpatient resource utilization; and to identify patient- and hospital-related predictors of inpatient length of stay (LOS), total charges, and inpatient mortality in bronchial and lung cancer. **METHODS:** A retrospective database analysis was conducted using the 2007 Nationwide Inpatient Sample (NIS) database of the Health care Cost and Utilization Project (HCUP). Patient- (age, sex, payer) and hospital-related (private, teaching, region) characteristics were included in the study. Outcome variables were LOS, total charges, and inpatient mortality. Descriptive analysis examined the differences in bronchial and lung cancer-related outcome variables. Regression analyses were conducted to investigate the predictors of LOS, charges, and inpatient mortality in bronchial and lung cancer. All statistical analyses were conducted using SPSS 17.0 version. **RESULTS:** The hospital discharges for bronchial and lung cancer in 2007 NIS were 153,017 (52.38% male, 57.59% in age group 65–84). Mean LOS was 7.3 ± 0.1 days, mean charges were $\$45,473 \pm 1,079$, and inpatient mortality was 11.42%. Majority (89.0%) of the hospitalizations were located in metropolitan areas. Most hospitalizations (76.45%) were in private, not-for-profit hospitals. Medicare was the most common payer for the hospitalizations. Total charges were highest for hospitalizations identified in the Western region (\$65,655) and in private, for profit hospitals (\$59,233). Inpatient mortality was highest among hospitalizations in non-metropolitan areas (16.06%). **CONCLUSIONS:** Bronchial and lung cancer is the second leading cause of death in United States and thus, it is important to characterize resource utilization and important predictors for the disease. Patient- and hospital-related characteristics identified from this study will be useful in stratifying high-risk individuals and those with high inpatient resource utilization. Disease management programs such as smoking cessation programs can be implemented in high-risk population which can improve patient well-being, reduce hospitalizations, and promote cost savings.

CANCER – Patient-Reported Outcomes Studies**PCN102**
EFFECTS OF VA ONCWATCH INTERVENTION ON COLORECTAL CANCER SCREENING ADHERENCEBian J¹, Fisher D², Lipscomb J³, Ribeiro M¹, Byrd-Sellers J¹¹Atlanta VAMC, Decatur, GA, USA, ²Duke University, Durham, NC, USA, ³Emory University, Rollins School of Public Health, Atlanta, GA, USA

OBJECTIVES: In 2008, the Veterans Integrated Service Network (VISN) 7 implemented the colorectal cancer (CRC) Oncology Watch intervention (OncWatch), an IT system aimed at improving screening adherence and expanding use of colonoscopy for diagnostic and surveillance follow-ups. This study is to evaluate the effects of the OncWatch on CRC screening adherence. **METHODS:** We used 1998–2009 Veterans Affairs (VA) administrative data to construct two cohorts of average-risk, age 50–64 veterans eligible for CRC screening, one for 2007 and the other for 2009. Average-risk, age 50–64 veterans across the VA in 2007 or 2009 were included in this study. Veterans in a cohort for a year were considered adherent if they completed fecal occult blood test during that year, flexible sigmoidoscopy or double-contrast barium enema during that year or the 4 previous years, or colonoscopy during that year or the 9 previous years. Using a difference-in-differences approach, we applied multivariable linear probability models with hospitals fixed-effects for estimation. **RESULTS:** The proportions of veterans adherent to screening in VISN 7 (including 9 hospitals) were 31.62% in 2007 and 34.37% in 2009; and the proportions in the control VISNs (including 120 hospitals) 30.27% and 32.33%, respectively. Among the screening adherent, the proportions adherent to colonoscopy in VISN 7 were 16.44% in 2007 and 24.40% in 2009; the proportions in the control VISNs 26.16% and 38.59%, respectively. The multivariable analyses showed that OncWatch was associated with a one-percentage-point increase in the likelihood of adherence among the veterans eligible for screening and a 3-percentage-point decrease in the likelihood of screening colonoscopy among the adherent ($P < 0.001$). **CONCLUSIONS:** This preliminary study suggests that OncWatch slightly increased the overall likelihood of screening adherence among average-risk, age 50–64 veterans. However, OncWatch may have unintentionally reduced use of screening colonoscopy, possibly because limited colonoscopy capacity was diverted from screening indications to diagnostic and surveillance indications.

PCN103
A REVIEW AND META-ANALYSIS OF COLORECTAL CANCER UTILITIES
Djalalov S¹, Hoch J², Tomlinson G³¹CRICH, Toronto, ON, Canada, ²Cancer Care Ontario, Toronto, ON, Canada, ³Toronto General Research Institute, Toronto, ON, Canada

OBJECTIVES: To perform a systematic review of the literature on the utility weights for colorectal cancer (CRC) health states; to determine the effects of study characteristics and role of “time to/from initial care” on utility values. **METHODS:** In a systematic review we identified 26 articles in English, providing 161 unique utilities for CRC health states elicited from 3574 respondents. Some utilities were estimated from SF-36 scores. Data were analyzed using Ordinary Least Squares and Linear Mixed-

Effects with CRC cancer type, condition, stage, time to/from initial care, instrument, administration and study design as independent variables. **RESULTS:** In the base model, the estimated utility of the reference case (scenario of a CRC patient on stage I-III in continues care and more than 1 year post-operation, rated by using EQ5D/HUI3) was 0.72. Cancer type, condition, stages, time to/from initial care, instruments and study design were associated with utility differences of 0.08 to 0.30 ($P < 0.05$). Utilities derived by using EQ5D/HUI3 instrument were 0.09 lower than SG/TTO, 0.08 lower than EQ5Dvas and 0.09 lower than SF-36 ($P < 0.01$) in the base model of OLS analysis. Those utilities differences were significantly larger in the supplemental model. Utilities elicited at “post-operation more than 1 year” were 0.15 higher than “preoperative”, 0.30 higher than “post-operation 1 year” in supplemental model. **CONCLUSIONS:** The CRC utilities review shows a lack of quality of life (QoL) studies for surveillance and terminal care that might cause high level uncertainty in the cost-effectiveness analysis results. Pre- and post-operative health states and time to/from health intervention are important factors that influence QoL. Utilities appear sensitive to factors such as cancer type, time to/from initial care and utility instruments.

PCN104
ESTIMATION AND COMPARISON OF EQ-5D HEALTH STATES' UTILITY WEIGHTS FOR PNEUMOCOCCAL AND HUMAN PAPILLOMAVIRUS DISEASES IN ARGENTINA, CHILE AND THE UNITED KINGDOMGalante J¹, Augustovski F¹, Colantonio L¹, Bardach A¹, Garcia Marti S¹, Caporale J¹, Kind P²¹Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina, ²University of York, York, UK

OBJECTIVES: EQ-5D is a widely used generic health measure. One concern is the comparability of EQ5D derived weights of selected health states among different countries. Our objective was to estimate and compare EQ-5D health states' weights for pneumococcal and human papillomavirus (HPV) diseases in three different countries (Argentina, Chile and United Kingdom (UK)). **METHODS:** Twelve health state vignettes (8 pneumococcal, 4 HPV) were designed and administered to a convenience sample in order to obtain descriptive data regarding the different disease-related EQ-5D health states. Subsequently, country specific EQ-5D time-trade off-based weights were used in order to map descriptive health states into local preference weights. Finally, inter-country differences for each condition were compared using repeated measures ANOVA. **RESULTS:** Between July and August 2009, 73 subjects (mean age = 31 years, range 22 to 58) successfully responded the questionnaire. Fifty-three percent of the respondents were female and 96% worked or studied in the health sector. For pneumococcal disease-related health states, utility coefficients' means ranged from -0.331 (sepsis, Chile) to 0.727 (auditive sequelae, Argentina). Regarding HPV-related conditions, their mean ranged from 0.152 (cervical cancer, UK) to 0.848 (CIN1, Argentina). Chile consistently showed the lowest values in pneumococcal states and in one HPV state, while those of UK were the lowest in most HPV states. Argentina showed the highest values in both disease groups. Mean differences between countries in pneumococcal health states were 0.256 (Argentina-Chile), 0.207 (Argentina-UK), and 0.048 (Chile-UK); and those for HPV were 0.117 (Argentina-Chile), 0.133 (Argentina-UK), and 0.017 (Chile-UK). Differences in country-specific values for each health state were statistically significant ($p < 0.001$). **CONCLUSIONS:** Preference weights for each condition differed significantly between analyzed countries even though the same health states' mix was valued for each. These results stress the importance of using local and not international weights in context-specific decision making processes.

PCN105
PATIENT PREFERENCE-BASED UTILITY WEIGHTS FROM THE FUNCTIONAL ASSESSMENT OF CANCER THERAPY-GENERAL (FACT-G) IN WOMEN WITH HORMONE RECEPTOR POSITIVE METASTATIC BREAST CANCER RECEIVING LETROZOLE PLUS LAPATINIB OR LETROZOLE ALONEDelea TE¹, Sofrygin O¹, Amonkar M²¹PAI (Policy Analysis Inc.), Brookline, MA, USA, ²GlaxoSmithKline, Philadelphia, PA, USA

OBJECTIVES: The EGF30008 trial demonstrated that first-line therapy with the combination of the anti-HER2 tyrosine kinase inhibitor lapatinib plus the aromatase inhibitor letrozole improves progression free survival vs. letrozole plus placebo among post-menopausal women with HER2+ and HR+ metastatic breast cancer (MBC). Results of analyses of the impact of lapatinib on patient health-related quality of life (QoL) based on FACT-B (Breast) questionnaire suggest that QoL was similar across treatment groups over 48 weeks. **METHODS:** This analyses estimated patient utility values for the treatment arms of EGF30008 using the FACT-G. Time-trade off (TTO) utility values were estimated using responses to 4 items from the FACT-G (Physical Well Being [PWB]-lack of energy, PWB-feel sick, Functional Well Being [FWB]-able to work, and FWB-able to enjoy life) and a published algorithm derived from 1433 cancer patients (Dobrez 2007). For each patient in the EGF30008 trial, mean utility values were calculated for assessments before vs. on after progression. Pre- and post-progression utilities were averaged across patients for each treatment group by weighting patient level utilities by the numbers of assessments per patient. **RESULTS:** Among HER2+ patients, mean TTO utility values at baseline were 0.86 (0.10) for letrozole and lapatinib (N = 84) and 0.86 (0.09) for letrozole+placebo (N = 73). Mean (SD) pre-progression utilities were 0.86 (0.13) for letrozole+lapatinib (N = 102) and 0.88 (0.13) for letrozole+placebo (N = 87). Utility values post-progression were based largely on a single assessment at disease progression for each patient and were 0.82 (0.12) for letrozole+lapatinib (N = 63) and 0.82 (0.10) for letrozole+placebo (N = 57).